

REMARKS

Drawing Objection to under 37 CFR 1.83(a)

The drawings are objected to under 37 CFR 1.83 (a) since the drawings have not shown every feature of the invention specified in the claims. It is incorrect.

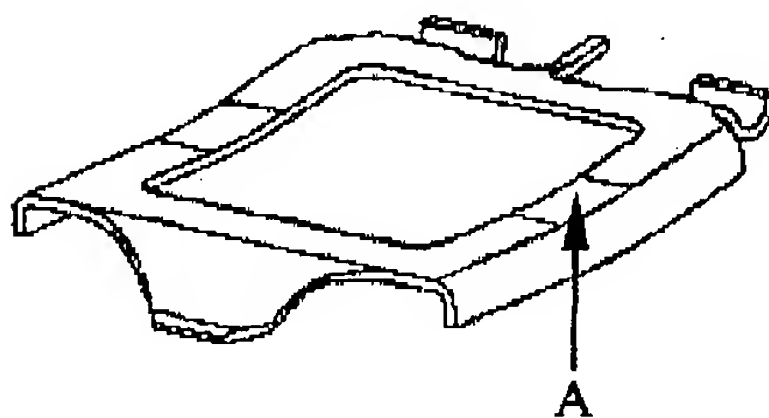


FIG. (a)

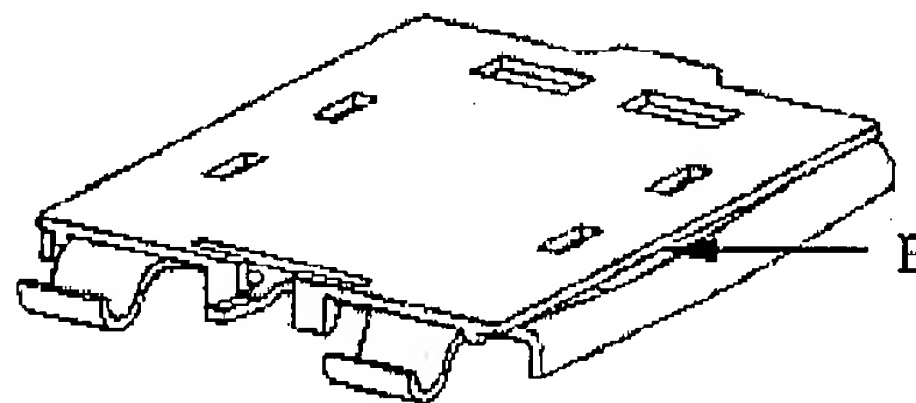


FIG. (b)

FIG. (a) is an isometric view of the metal clip shown in FIG. 1 of the original drawings, and FIG. (b) is an isometric, assembled view of the pick up cap and the metal clip in FIG. 3 of the original drawings. Referring to FIG. (a), a downwardly curved configuration signed with A in FIG. (a) has been shown. Referring to FIG. (b), a concave space formed above the downwardly curved configuration of the clip and signed with B in FIG. (b) has been shown.

Withdrawal of the objection to the drawings is respectively requested.

Claim 1 Objection

In response to the above objection, applicants have amended claim 1. In amended claim 1, "an LGA connector, comprising" is deleted.

Claim Rejections under 35 U.S.C. 112

Claims 15, 16 and 19 are rejected under 35 U.S.C. 112, *first paragraph*.

"The clip having an upwardly concave space for receiving a convex configuration formed on the underside of the cap" is shown in FIGS. 1, 3 and 4, and disclosed in the amended paragraph [0017]. Therefore, withdrawal of the rejections to claims 15, 16 and 19 is respectively requested.

Claims 13-20 are rejected under 35 U.S.C. 112, *second paragraph*.

In response to the above rejections, applicants have amended claims 13 and 18 to recite the related vacuum suction device. Claims 14-17 and 19-20 depend from claims 13 and 18, respectively. Therefore, withdrawal of the rejections to claims 13-20 is respectively requested.

Claim Rejections under 35 U.S.C. 102

Claims 18 and 20 are rejected under 35 U.S.C. 102 (b) as being anticipated by Farnworth et al (US 5,815,000).

Claim 18 defines (I) a clip pivotally located on the top portion the housing subassembly, and (II) a pick-up cap for suction by a vacuum suction device with provision of a sufficiently large planar top surface thereon.

Differently, in Farnworth et al. the clip (22) is clearly NOT *pivotally* located on the top portion of the housing subassembly. In addition, the cover (24) is NOT a pick-up cap for suction by a vacuum suction device but only for fixation, needless to say WITHOUT provision of a sufficiently large planar top surface (for suction usage). Indeed, the typical vacuum suction device usually engages the center portion of the planar top surface of the pick-up cap for the efficiently balanced pick-and-place operation. Anyhow, the opening (48c) in the center portion of the cover (24) precludes this possibility/operation.

Therefore, claim 18 is believed to patentably distinguish over Farnworth et al.

Claims 19 and 20 are also allowable by reason of their dependencies upon claim 18, wherein claim 19 further defines "the convex configuration compliantly received in the upward concave space in the clip" that is not disclosed or suggested in Farnworth et al.

Claim Rejections under 35 U.S.C. 103

Claims 1-3, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnworth et al. in view of Lin (US 6,155,848).

In response to the above rejections, claims 1 and 13 have been amended. Applicants request reconsideration of rejection for the following reason:

Farnworth et al. and Lin do not teach or suggest all limitations of amended claim 1. Regarding amended claim 1, a LGA connector defined therein comprises an insulative housing, a metal clip disposed on the housing to pressing an electronic package upon contacts, and a pick up cap attached to the clip. Referring to FIG. 1 of Farnworth et al. and FIG. 1 of Lin, a connector disclosed therein comprises a force applying mechanism which is not a metal clip. Additionally, the difference between amended claim 1 and Farnworth et al. in view of Lin is non-obvious to a person having ordinary skill in the art. Therefore, amended claim 1 is patentable over Farnworth et al. in view of Lin.

Claims 2 and 3 have been canceled without prejudice, the rejections to claims 2 and 3 are moot.

Farnworth et al. and Lin do not teach or suggest all limitations of amended claim 13. Regarding amended claim 13, a metal clip is defined therein. Farnworth et al. or Lin does not disclose any metal clip. Additionally, the difference between amended claim 1 and Farnworth et al. in view of Lin is non-obvious to a person having ordinary skill in the art. Therefore, amended claim 13 is patentable over Farnworth et al. in view of Lin.

Claims 14-17 are also patentable over Farnworth et al. in view of Lin since they depend from amended claim 13.

New Claims 21-24 Patentable over Farnworth et al. or Lin

Applicants have added new claims 21-24.

Newly added claims 21-24 are patentable since they directly depend from amended claim 1 wherein claim 24 essentially defines the subject matters similar to the objected/allowable claim 4 in which the cap defines a clasp fastened to a locking edge of the clip.

In view of the above claim amendments and remarks, the subject application is believed to be in a condition for allowance and an action to such effect is earnestly solicited.

Respectfully submitted,

LIAO ET AL

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